

IT'S CHEWING GUM TIME

THE SALES ENORMOUSLY INCREASE
IN WARM WEATHER.

A Scientific Justification For the Habit—
Millions of Pounds of Gum Used in
the United States—Effect of the Dis-
covery of Chicle.

The chewing gum season has begun, and the sales of the various chewing gum companies have bounded upward. Holiday makers include chewing gum in their festive equipment. Bicyclists are abroad in the summerland, and the bicyclist is your gum chewer extraordinary. Then, too, there is a serious and scientific justification for gum chewing in warm weather, though it is to be doubted whether many mortals chew in order to fulfill a duty toward their physical mechanism. The chewing of gum in hot weather excites the saliva, moistens the throat and relieves thirst. Natives of tropical countries know this, and often chew pure chicle, which is the basis of all good chewing gum, or even rubber, while working in the heat. Chewing gum is often recommended for soldiers' use on long marches, and last summer officers in the Philippines reported that the gum habit was of great benefit to the men, because it lessened their drinking and enabled them to go without water longer than possible under other circumstances.

So hot weather and chewing gum are affiliates. Nevertheless the sales of gum at any time of the year are tremendous. Even a statement of them is enough to appeal to the imagination of the individual chewer and make his jaws ache. Within recent years a number of the most successful chewing gum companies have consolidated, and now most of the best brands of gum are manufactured and controlled by one large company. This one company sells on an average 135,000,000 packages of chewing gum every year, and the sales are constantly increasing.

When to these 135,000,000 packages of good gum one adds the tremendous quantity of cheap and inferior gum that is in the market the sum total wakens a feeling of awe in the breast of the investigator. About 2,600,000 pounds of chicle is imported by the United States yearly and, though chicle is the fundamental principle of chewing gum, it is mixed in manufacture with many times its weight of sugar, paste, essential oils, etc., so that the 2,600,000 pounds is but a small fraction of the weight of the chewing gum manufactured in the United States each year.

This tremendous demand has grown up within comparatively few years. The chewing gum industry did not begin to assume much importance until about fifteen years ago, but after it got a start it struck a surprising pace. Its first great impetus came with the discovery of the possibilities of chicle as a basis for the gum. Before that chewing gum was made, but it was poor and unsatisfactory in quality, the old-fashioned spruce gum being perhaps the best of the assortment.

A New York man with an eye open to good things went down to Mexico and met some men who dreamed about getting rich in quick fashion. Later these friends heard of chicle gum and believed that they had dreamed true—not that they had a nightmare vision of 135,000,000 packages of chewing gum. They weren't really dreamers of the first magnitude. That was reserved for the New York man. But the men in Mexico believed that chicle at a few cents a pound could be profitably used for the adulteration of rubber.

They sent a consignment of chicle to their New York friend. He wished they hadn't. He tried the rubber idea and found nothing doing. Just as he had about decided to throw away the rest of the stuff he had an inspiration. The very qualities that spoiled chicle for rubber might fit it for gum. He boiled some of the chicle, cut it into sticks and originated the old-time New York snapping gum. It was pure chicle with no sweetening and no flavor. Chewing it was a good deal like being condemned to hard labor, but it sold like hot cakes. The demand ran far in advance of the supply, and from that small beginning the present great industry was evolved.

Chicle was used for various things long before its chewing gum apothecosis. It is said that mention was made of it in New World reports in the time of Ferdinand and Isabella. However, its use was purely local, and the American demand for it has fairly revolutionized the districts from which it comes. So far, it has been found only in Yucatan, and the entire supply is shipped from the various ports along the Yucatan coast. Its name is Mexican for the Achras sapote, the tree from which it is procured.

These trees are found only in the interior, and the work of obtaining the gum and transporting it to the nearest shipping point has always been troublesome, though it has been much simplified in recent years. There are many exporting firms in the Yucatan coast towns, many of them under the management of Northern men. Mexican peons are taken into the interior and work for a few months' season, at wages ridiculously small. The pay is, however, fairly well proportioned to the quality of the work, and the wear and tear of handling the workmen, who are as hopeless a proposition as any manager might expect to meet. Strikes and rows of all kinds are a regular thing, and murder is common enough to lose its picturesqueness; so the peaceful and tranquilizing chewing gum has its birth in storm and stress.

The largest chewing gum company in America has recently acquired 2,500,000 acres of land in Yucatan, and is working it as a source of chicle supply. The company's managers take the workmen in from Vera Cruz,

and the reports of those managers are enough to move the obelisk to tears. Troubles of their own? They haven't anything but trouble, and their opinion isn't fit for publication. Still, the experiment is proving successful and insures a steady supply at a rational price, although the company does not expect to obtain from its own land enough chicle to fill its requirements.

The quality of chicle varies according to the district from which it comes, the geological formation of the soil affecting the elasticity and purity of the gum. According to the quality used, the care expended upon purifying it, and the proportion of it used, chewing gum is good or bad. The cheap grades are necessarily inferior, for, though good gum could be made cheaply in earlier times, that is impossible now. The cost of chicle has risen from two or three cents to thirty cents, and there is a ten per cent. duty upon it.

The best chewing gum manufacturers test all chicle carefully and reject all that is not of the best quality. They employ expert chemists, and under their supervision the gum is refined again, until it is free from all impurities. The best gum when chewed may be pulled out into very fine threads before it will break. If it will not do that, or if there is a rubber-like recoil when the tension is lessened the gum is of inferior quality.

Paste, sugar and essential oils are added to the chicle in the making of the chewing gum, the different manufacturers have their own formulas and processes which are jealously guarded. The one company referred to has factories in several cities and pays out \$3000 a week to its employees.—New York Sun.

Police Intelligence.

The intelligence displayed by some desk sergeants frequently excites the awe and wonder of the operators at Police Headquarters in Brooklyn, whose duty it is to receive reports of police happenings over the telephone from the various station houses.

The other night a sergeant in one of the South Brooklyn precincts was sending in a report about a slight accident in which a man was injured. The ambulance surgeon who attended the man had described the nature of his injury to the intelligent patrolman on the post, and the latter jotted it down in his book while returning to the station house. The intelligent sergeant, reporting to Headquarters, described the man's injuries as follows: "He received a precise wound of the alteration."

"A what?" asked the astonished operator. The sergeant repeated the description of the wound.

"Say," said the operator, "you don't expect me to enter any such fool report as that, do you? You'd better study the thing over."

The sergeant consulted with the patrolman, and then returned to the telephone.

"I made a mistake about that, old man," he admitted to the operator. "The officer says it's a spliced wound of the abandonment. It's dead easy to get mixed on them medical terms, you know."

To the operator the thing was now shrouded in impenetrable darkness. Despairing of obtaining any light from the sergeant or patrolman, he called up the ambulance surgeon at the hospital.

"Say, doc," he asked, "what kind of an injury has that man got whom you just brought in?"

"An incised wound of the abdomen," explained the surgeon.

Paving the air wildly and pronouncing like a whirling dervish, the operator made for the electric fan, turned it on, and flung himself, limp and perspiring, back into his chair.—New York Times.

Twelve Hours in a Submarine.

The Narval returned to port, a London Express telegram from Cherbourg says, after its experiment of twelve hours' continuous work under water. According to the paragraph distributed for insertion in the French press, the "trial succeeded without incident," but from the official report furnished by Naval Surgeon Gibrat, who represented the Ministry of Marine, it is clear that life under the ocean wave scarcely comes up to the sailor's ideal of a jolly existence. After six hours under water the inhaling of artificial air became difficult, the long exclusion of natural atmosphere caused a painful irritation of the nerve centres, which even the coolest of the officers could not resist; and anaemia set in, accompanied by cerebral compression and sick headache that became absolutely cruel. Finally the manufacture of electricity under water liberated among the crew salts of lead and sulphur that generated digestive and intestinal troubles, which the constant distribution of milk could not counteract.

Children Killed at Fires.

At the conference of Coroners of England and Wales, held at the Holborn Restaurant, the loss of juvenile life by burning came up for discussion. The Home Secretary had requested the society to inform him as to the statistics of the deaths resulting from this cause. A partial investigation had taken place, which showed that within a brief period there had been in round numbers 1700 children burned to death in English houses, 1300 fatalities having occurred in houses where no fireguard was in use to prevent this kind of accident. In only one case had criminal negligence been proved, and the person guilty had been convicted and punished. This exceptional case occurred at West Hartlepool. The Coroners' Society resolved to make a special representation to the Home Office on the subject in terms to be settled by the council of the society.—London Review.

SCIENCE & MECHANICS

A Paris newspaper announces the invention of an instrument called the tonophone, which registers sounds too faint for human hearing, and which will enable navigators to determine the exact position of other vessels in a fog.

One of the simplest, cheapest and best sterilizers is sunshine, and it is important to allow as much sun in a sick room as possible. The same rule is applicable to the rooms of healthy people. The good effects of "sun bathing" in the treatment of convalescents is ample proof of the utility of the rays of the sun for therapeutic purposes.

One of the professors at the Pasteur Institute in Paris has discovered a microbe that breeds a pestilence among rats. Specimens of it have been tested on farms and in warehouses with success. In one-half the cases the whole colony of rats were destroyed; in other cases, the number was greatly reduced. Thus science will take the place of nature, and the occupation of the cats will be gone.

An instance of the transformation by scientific means of a deleterious into a useful substance is furnished by a process recently invented in Germany, in connection with the manufacture of superphosphate fertilizer where apatite is used. The large volumes of hydrofluoric acid that are given off seriously contaminate the atmosphere, but by the new process these gases are recovered in the form of fluosilicic acid, which is used in the manufacture of artificial stone for hardening soft limestone and sandstone, and for other purposes.

Under certain conditions there may be seen in the night sky, exactly opposite to the place where the sun may then be, a faint light, rounded in outline, to which the name "gegenschein" has been given. It has always been a mystery to astronomers, but Professor Pickering has suggested that it may be a cometary or meteoric satellite of the earth. He thinks it may be composed of a cloud of meteors, 1,000,000 miles from the earth, and revolving around it in a period of just one solar year, so that the sun and the ghostly satellite are always on opposite sides of the earth.

Professor Standfuss, of Zurich, has been studying the effects of solar heat and temperature on butterflies. More than forty thousand butterflies were subjected to close examination. Some degrees more or less change the nature and looks so much that they take on every appearance of having been born in a warmer or colder climate. On one occasion, it being very cold in Switzerland, a butterfly common there suddenly began to look like a butterfly from Lapland. Others subjected to a higher solar temperature changed and looked like butterflies from Corsica or Syria. The experiments, which are to be continued, led to the production of butterflies of an entirely new type, some being of a very beautiful description.

Soda as Fire Extinguisher.

"Druggists generally realize the value of soda fountains in extinguishing fires," said Chief Musham, of Chicago, the other day to an Inter-Ocean reporter. "They have not, however, carried the idea very far. If each drug store which has a fountain were supplied with a slender line of hose, which could be attached, many small fires which afterwards grow to large ones could be extinguished promptly. An average soda fountain can force a small stream of water ten or twelve feet. It carries a pressure of 125 to 180 pounds, which is enough for fire extinguishing purposes.

"Many an incipient blaze has been extinguished by the use of a soda siphon. The great point is to get at the flames at the beginning. If hose were provided, with attachments by which it could be coupled to the fountain, a saving of thousands of dollars in small fires could be effected each year."

Amusement of Boer Prisoners.

The Boer prisoners at St. Helena amuse themselves in many ways. They are very fond of cricket and football. They have a recreation hall, in which their musical club frequently gives concerts. They have among them a musical composer named Schumann, who claims to be a collateral descendant of the great composer. He has written a Boer hymn since his captivity. There are many tradesmen among them, and they are constantly encouraged to ply their trades. They carve napkin rings from beef bones, and make fine walking sticks, for which they are granted material from the Government forests.—The Photographic Times.

"Thackeray Street."

Another new Kensington street name, says the London Chronicle, has literary interest. The improved street between Charles street and Kensington Square has been named Thackeray street, in honor of the author of "Vanity Fair," who lived for eight or nine years in Onslow Square, close by. At the house which he had built for himself at No. 2 Palace Green, Kensington, he died on Christmas Eve, 1863. Apparently there is no other street in London bearing his name, though a large temperance hotel in the Bloomsbury district has been named the Thackeray, and has been followed by a Kingsley.

RELIABLE DAIRYMEN.

DIRECTORY OF LEGITIMATE DEALERS.

The following dairymen are known to the Editor of the CITIZEN as reliable producers, who own their own herds of cattle and deliver their own product. There are no milk hucksters in this list.

BENNING FARM DAIRY,

J. P. REILLY, Proprietor.
Benning, - - - D. C.
Established 1892. Pure milk right from the farm served in sealed jars twice a day. Customers are invited to inspect my dairy at their pleasure.

HILLOCK DAIRY,

JOHN BERGLING, - - - Proprietor.
Brentwood Road, Md.
Established 1894. Pure milk served to my customers fresh from the dairy every morning.

OAK GROVE DAIRY,

D. MCCARTHY, - - - Proprietor.
Bladensburg Road, D. C.
Established 1895. Fresh milk delivered direct from my dairy farm every morning. Two deliveries a day contemplated noon.

St. John's Park Dairy,

Mary Harriet Hatcher, Prop.
Brookland, D. C.
Established 1896. Pure milk delivered every morning. We invite an inspection of our place at all times. Milk for children a specialty.

Woodside Farm Dairy.

JOHN HERRIGAN, - - - Proprietor.
8601 O Street N. W.
Established in 1885. Pure Durham and Alderney milk from Woodside Farm Dairy, on the Ridge Road. Two deliveries daily. Prompt service.

IF You want bread of standard excellence, ask your dealer to supply you with . . .

White Lily Patent

A HIGH GRADE FLOUR
Manufactured by . . .
G. W. CISEL & CO.
GEORGETOWN, D. C.

We manufacture other brands of High Grade Roller Process Flour that we sell at a very moderate figure to the trade, but for family use the WHITE LILY PATENT is not excelled by any flour on the market. We grind Maryland and Virginia wheat entirely, because long experience has taught us that it is the best in the United States.

G. W. CISEL & CO.,
ARLINGTON ROLLER MILLS,
...GEORGETOWN, D. C.

THOMAS W. SMITH, Lumber & Merchant,

SASH, DOORS, BLINDS, GLASS
AND MILL WORK,
Washington, - - - D. C.
Office, 1st St. and Indiana Ave. N. W.
Mill, F. & N. J. Ave., S. E.
Wharf, 4th St. Eastern Branch.

BRIGHTWOOD HOTEL,

TH. FELTER, Prop.
BRIGHTWOOD, D. C.

A Properly Conducted Road House. Can be reached from any part of the city for one fare. Ask for the transfer to the Brightwood Line. Refreshments, Meals and Lunches served on short notice and at all hours.

Long Distance Telephone.

Ruppert's - Park,

Otto C. Ruppert, Proprietor,
BLADENSBURG ROAD.
Pleasant Drive from Washington. Short walk from Station. Cycle Track, Picnic and Baseball Park and other Outdoor Amusements.

50 YEARS' EXPERIENCE PATENTS

Anyone sending a sketch and description will quickly ascertain our opinion free whether an invention is probably patentable. Communications strictly confidential. Handbook on Patents sent free. Oldest agency for securing patents. Patents taken through Munn & Co. receive special notice, without charge, in the Scientific American. A handsomely illustrated weekly. Largest circulation of any scientific journal. Terms, \$5 a year; four months, \$1. Sold by all newsdealers. MUNN & CO. 361 Broadway, New York Branch Office, 235 F St., Washington, D. C.

CONGRESS HEIGHTS DAIRY.

JOSEPH WAHLER & SON, - - - Proprietors.
CONGRESS HEIGHTS, D. C.
Established 1863. We deliver pure milk direct from the farm every morning.

PAYNE'S FARM DAIRY,

M. J. PAYNE, Proprietor.
Bladensburg, - - - Maryland.
Established 1886. It is my aim to serve my customers with the very best quality of milk. I invite an inspection at any time.

NATIONAL PARK DAIRY

J. P. MORROW, Proprietor.
Broad Branch Road, D. C.
Established 1884. Pure milk from sound, healthy cattle delivered to all parts of Washington.

HOYLE'S FARM DAIRY,

MRS. A. J. HOYLE, Proprietor.
Congress Heights, - - - D. C.
Established 1894. We serve first-class milk all bottled on the farm. Dairy always open to inspection.

Buena Vista Dairy,

O. A. LANDON, - - - Proprietor
Sutland Road, near Sutland, Md.
Established in 1896. I am on the farm with fifty head of cattle and deliver only pure milk that will always bear inspection.

PALISADES DAIRY,

W. L. MALONE, - - - Proprietor.
[Conduit Road, D. C.
Established 1893. Pure milk and cream served in any part of the city every morning. I think the best is none too good for my customers.

CHILLUM FARM DAIRY;

WM. MCKAY, Proprietor.
Woodburn, (Terra Cotta), D. C.
Established 1891. I serve pure milk right from the farm every morning. I think the best is none too good for my customers.

Douglas Place Farm Dairy

EDW. HARKHAM, Proprietor.
Douglas Place, Benning Road, D. C.
Established 1895. I spare neither pains nor expense in trying to produce milk that is A No. 1 in quality. Plant always open to inspection.

TERRELL'S DAIRY.

F. TERRELL, - - - Proprietor.
Arlington, Virginia.
Established 1891. I serve milk straight from the farm every morning. My milk will stand the test every time.

Glen Ellen Farm Dairy,

GEO. T. KNOTT, - - - Proprietor.
Conduit Road, D. C.
Established 1896. Milk from my dairy is guaranteed to be both clean and pure. I always solicit the closest inspection.

"AS WE JOURNEY THROUGH LIFE
LET US LIVE BY THE WAY."
-- WE HAVE THE VEHICLE END OF IT.
In our salesrooms you will find on exhibition
PLEASURE and
DRIVING
CARRIAGES

Of various grades in suitable variety. We build work to order and sell manufactured goods, such as Harness, Whips, Laprobes, Blankets, &c.
BLACKSMITHING IN ALL ITS BRANCHES.
J. A. WINEBERGER,
3600 BRIGHTWOOD AVENUE, N. W.

From the AMERICAN JOURNAL OF HEALTH, JANUARY 25, 1899.

The Necessity of Purity in Laundry Soaps.

BY J. M. MARTIN, M. D.
We are frequently asked why the American Journal of Health insists so strongly upon the purity of the laundry soap used in the households of its readers, the questioner in most cases implying that it makes very little difference what kind of soap is employed for such purposes. No greater mistake can be made, for there is no feature in the domestic economy fraught with greater importance than is the matter of the laundry soap used. Strange to say, the very persons who are critical and exacting in every detail of their toilet, and who would not under any circumstance allow any save the finest of soaps in their bathrooms or upon their dressing table, seem to be utterly oblivious to the uncleanness inseparable from the employment of impure laundry soaps, to say nothing of the dangers of skin diseases which are apt to follow the use of such deleterious articles. Yet the writer does not hesitate to declare—and his statement will be borne out by the experience of every physician of extended practice—that more cutaneous disorders have their origin in the use of inferior laundry soaps than are caused by the employment of low-grade toilet soaps in the dressing-room.

If it were impossible to obtain pure laundry soaps, carelessness in this regard would be excusable, but where highest grade goods of the kind are easily procurable there does not exist the slightest reason for ignoring one of the most important features in the prevention of disease in the household. For example, we would refer to the product of Weaver, Kencla & Company, of Washington, D. C., which, after most searching tests, we are prepared to commend to every reader as a pure and meritorious product. Prof. Norbert Fraenkel, the eminent analytical chemist, of New York City, makes the following report concerning this soap:

"After the most searching chemical tests and analyses of the laundry soap made by Weaver, Kencla & Company, I do not hesitate to pronounce it to be one of the purest articles of the kind ever brought into my laboratory. It is absolutely free from foreign substances and no dangers of disease will be incurred by its use in either laundry or bath. Scientists who realize the grave dangers which follow the wearing of articles of clothing to which cling minute particles of irritating substances which are incorporated in laundry soaps to increase either the weight or the bulk of the same, will appreciate the truth of the statement that such pure laundry soaps as those made by Weaver, Kencla & Company furnish the housekeeper an absolute protection from the dangers of this nature, which otherwise would be incurred."

In addition to the opinion of this well-known analyst, we have received equally conclusive evidence as to the purity and worth of the goods in question, and, therefore, we do not hesitate to say that the housewife who fails to make due note of the fact that the product of Weaver, Kencla & Company offers her and her entire family a safeguard against the dangers which follow the use of laundry soap composed of impure materials and manufactured without the slightest regard to the health of the user. A better or a purer article it would be impossible to find.

ECONOMICAL AND SAFE.
Economical because it is pure. Bleaches and will not injure the clothes. Safe because it is made of pure, healthy material—namely, pure beef tallow prepared by ourselves and the purest and best chemicals—thus avoiding the danger arising from the use of diseased uronic and fats, which often cause serious trouble.

WEAVER, KENCLA & CO., LAUNDRY SOAP.
Is sold only in two and three-pound bars (not wrapped), and every bar is stamped as above. It is put up in boxes containing sixty pounds, and is for sale by the best grocers. If your grocer won't furnish the goods and offers something he claims to be just as good, send to us at \$3.00 and we will deliver to you a box containing sixty pounds.

WEAVER, KENCLA & CO.,
3242 to 3252 K Street, - - - WASHINGTON, D. C.

You See This? SO DO THOUSANDS OF OTHER PEOPLE.
Suppose your Advertisement were here?